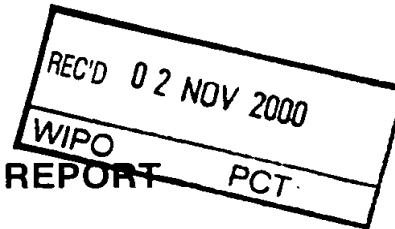


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 7628/DQ		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) FOR FURTHER ACTION	
International application No. PCT/US99/22395	International filing date (day/month/year) 24/09/1999	Priority date (day/month/year) 25/09/1998	
International Patent Classification (IPC) or national classification and IPC C11D17/06			
Applicant THE PROCTER & GAMBLE COMPANY et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☐ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 16/03/2000	Date of completion of this report 31.10.2000
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Renoith, H Telephone No. +49 89 2399 8589 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US99/22395

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

Description, pages:

1-19 as originally filed

Claims, No.:

1-18 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☒ the entire international application.
☐ claims Nos. .

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US99/22395

- ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

- ☒ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☐ no international search report has been established for the said claims Nos. .

ITEM III

The compositions of the present claims are characterized by having a so-called homogeneity number of less than about 0.5 or greater than about 1.

The method for calculating this homogeneity number is described in the application. However, the calculation of this parameter requires an undue burden of testing for any prepared composition. In fact, the present application does not contain any indication upon which compositional features or method of preparation are essential for obtaining the required value of the above mentioned index, all being an indication of the homogenous distribution of a component throughout the granular composition..

The skilled man is thus required to carry out the time consuming calculation of page 3 of the present application for any prepared composition, without knowing in advance whether the prepared composition would fall within the scope of the claims or not. This is undoubtedly an undue burden for the skilled man. Therefore, the present application is considered not to contain sufficient information such that a skilled man could carry out the invention without this undue burden of testing and does not comply therefore with the requirements of Article 5 PCT.

Moreover, according to the present claims it is not required that all ingredients are so distributed throughout the particles that the granulate complies with the required homogeneity number with respect to all ingredients, but it is sufficient that one component has such a distribution. This leads to the absurd that the granular composition may comply with the homogeneity number with respect to an ingredient but not with respect to other ones. Therefore, the scope of the claims is totally unclear and does not clearly and sufficiently define the wished scope.

The process of claim 13 does not help further in identifying suitable compositions, since it does not encompass any specific method of preparation of the granulate, but it just requires that a base granulate formed, e.g. by spray-dried granules and additives, is passed to a mixer, which can be of any type.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/22395

The word "about" referred to the numerical limits in the claims draw further uncertainty upon the scope of the claims.

The illustrative examples of the present application confirm that neither the compositional characteristics, nor the process features, are essential for achieving the required homogeneity index.

The presently alleged invention appears therefore to amount rather to the discovery of the dependency of the solubility of a granular detergent composition upon a formula represented by the homogeneity index. However, a discovery is not an invention and as such the requirements of Article 5 PCT are not complied with.

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C11D 17/06, 11/00	A1	(11) International Publication Number: WO 00/18877 (43) International Publication Date: 6 April 2000 (06.04.00)
(21) International Application Number: PCT/US99/22395 (22) International Filing Date: 24 September 1999 (24.09.99) (30) Priority Data: PCT/US98/20223 25 September 1998 (25.09.98) US 60/140,088 21 June 1999 (21.06.99) US (71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): CAPECI, Scott, William [US/US]; 3285 Citation Lane, North Bend, OH 45052 (US). RIDYARD, Mark, William [GB/GB]; 42 Ravenswood Road, Heaton, Newcastle NE6 5TU (GB). MORT, Raul, R., III [GB/GB]; 510 Compton Road, Cincinnati, OH 45215 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).		(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (Utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: GRANULAR DETERGENT COMPOSITIONS HAVING HOMOGENOUS PARTICLES AND PROCESS FOR PRODUCING SAME		
(57) Abstract A detergent composition which has improved solubility or dissolution in laundering solutions, especially in solutions kept at cold temperatures (i.e., less than about 30 °C), is provided. The granular detergent composition is aesthetically pleasing to consumers and has improved flowability. The granular detergent composition has a homogeneity number of greater than 1 wherein the homogeneity number is defined by the equation $HN = X_{bulk}/X_{part}$. A process for producing the detergent is also provided.		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

International Application No.

US 99/22395

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C11D17/06 C11D11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 92 07932 A (PROCTER & GAMBLE) 14 May 1992 (1992-05-14) page 16, line 3 - line 35: examples 3-10 ---	1-3, 13, 14, 17, 18
X	GB 2 317 393 A (PROCTER & GAMBLE) 25 March 1998 (1998-03-25) examples ---	1-3
X	WO 98 35004 A (PROCTER & GAMBLE) 13 August 1998 (1998-08-13) page 47, line 25 -page 48, line 16 ---	1-3
A	WO 97 10326 A (PROCTER & GAMBLE) 20 March 1997 (1997-03-20) page 12, line 25 -page 13, line 2: tables 1- --- -/--	1, 2, 4, 13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 January 2000

Date of mailing of the international search report

25. 02. 2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040. Tx. 31 651 epo nl.
Fax: (+31-70) 340-3016

Authorized officer

Grittern, A



PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

RECEIVED
MAR 2 2000
PCT P & G Patent Office
NOTIFICATION OF TRANSMISSION OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

To:
THE PROCTER & GAMBLE COMPANY
Attn. REED, D.
5299 Spring Grove Avenue
CINCINNATI, OHIO 45217-1087
UNITED STATES OF AMERICA

NOTIFICATION OF TRANSMISSION OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

B.M. Bolam
J.W. Peet/NTC
xc: Watty/ECatty/GH/file

CL 2188/99

Date of mailing
(day/month/year) 25/02/2000

Applicant's or agent's file reference
7628/DQ

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US 99/ 22395

International filing date
(day/month/year) 24/09/1999

Applicant

THE PROCTER & GAMBLE COMPANY et al.

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority

 European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Maurizio Amodeo

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 7628/DQ	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/US 99/ 22395	International filing date (day/month/year) 24/09/1999	(Earliest) Priority Date (day/month/year) 25/09/1998
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 99/22395

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-14 (partial)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-14 (partial)

Present claims contain so many options, variables, possible permutations and provisos

that a lack of clarity within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear and concise, namely for granular detergent compositions made of multi-particle systems, e.g. spray-dried granules and agglomerates (see page 5, lines 8 to 17 of the description). Applicant states that the homogeneity number (hereinafter called HN) as defined in claim 1 and in the description (see page 5, last paragraph to page 7 second paragraph) is the quotient of the compositional homogeneity between particulate admixture components (hereinafter called Xbulk) and the compositional homogeneity within a defined domain structure of the individual particles comprising a specific particulate component (hereinafter called Xpart) or in other words Xbulk is the ratio of the concentration of the selected ingredient in the particle with the lowest non-zero level of that ingredient to the concentration of the selected ingredient in the particle with the highest level of the selected ingredient and Xpart is the ratio of the concentration in the discrete volume with the lowest amount of the selected ingredient to the concentration in the discrete volume of the particle having the highest amount of the selected ingredient.

According to page 6 lines 3 to 4 of the description the selected ingredient can be any component useful in granular detergent compositions, e.g. surfactant, builder, polymer etc. However this means that the value of HN for a given granule would be different for different components which makes a comparison with the state of the art impossible unless it is known on which component the calculation is based on. In order to carry out a meaningful search, a surfactant has been chosen as the selected detergent ingredient for the calculation of HN (see claim 2).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/22395

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D17/06 C11D11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 92 07932 A (PROCTER & GAMBLE) 14 May 1992 (1992-05-14) page 16, line 3 - line 35; examples 3-10	1-3, 13, 14, 17, 18
X	GB 2 317 393 A (PROCTER & GAMBLE) 25 March 1998 (1998-03-25) examples	1-3
X	WO 98 35004 A (PROCTER & GAMBLE) 13 August 1998 (1998-08-13) page 47, line 25 - page 48, line 16	1-3
A	WO 97 10326 A (PROCTER & GAMBLE) 20 March 1997 (1997-03-20) page 12, line 25 - page 13, line 2; tables 1- --- -/--	1, 2, 4, 13

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 January 2000

Date of mailing of the international search report

25. 02. 2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Grittern, A

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/22395

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>✓ US 5 431 857 A (CAPECI SCOTT W) 11 July 1995 (1995-07-11) column 3, line 40 -column 4, line 20; claims; examples</p> <p>-----</p>	<p>1,2, 13-17</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/22395

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9207932 A	14-05-1992	US 5108646 A	28-04-1992
		AU 8949591 A	26-05-1992
		CA 2094831 A,C	27-04-1992
		CN 1061995 A	17-06-1992
		CZ 281939 B	16-04-1997
		CZ 9300633 A	13-07-1994
		EP 0554366 A	11-08-1993
		FI 931843 A	23-04-1993
		HU 67248 A,B	28-03-1995
		JP 2941422 B	25-08-1999
		JP 6502445 T	17-03-1994
		MX 9101779 A	05-06-1992
		NO 931474 A	25-06-1993
		NZ 240351 A	25-11-1994
		PL 173578 B	31-03-1998
		PT 99337 A	30-09-1992
		SK 39593 A	12-01-1994
		TR 25528 A	01-05-1993
		TR 26518 A	15-03-1995
GB 2317393 A	25-03-1998	AU 4356597 A	17-04-1998
		EP 0929637 A	21-07-1999
		WO 9813463 A	02-04-1998
WO 9835004 A	13-08-1998	GB 2321900 A	12-08-1998
		GB 2332445 A	23-06-1999
		AU 6149698 A	26-08-1998
		AU 6152098 A	26-08-1998
		AU 6272298 A	26-08-1998
		AU 6321098 A	26-08-1998
		AU 6322098 A	26-08-1998
		WO 9835002 A	13-08-1998
		WO 9835003 A	13-08-1998
		WO 9835005 A	13-08-1998
WO 9710326 A	20-03-1997	BR 9610548 A	06-07-1999
		CA 2232071 A	20-03-1997
		CN 1202198 A	16-12-1998
		EP 0876473 A	11-11-1998
		JP 11512473 T	26-10-1999
		US 5733862 A	31-03-1998
US 5431857 A	11-07-1995	CA 2181242 A	27-07-1995
		CN 1143976 A	26-02-1997
		JP 9508162 T	19-08-1997
		WO 9520035 A	27-07-1995

INTERNATIONAL SEARCH REPORT

International Application No

T/US 99/22395

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 431 857 A (CAPECI SCOTT W) 11 July 1995 (1995-07-11) column 3, line 40 -column 4, line 20; claims; examples -----</p>	<p>1,2, 13-17</p>

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-14 (partial)

Present claims contain so many options, variables, possible permutations and provisos

that a lack of clarity within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear and concise, namely for granular detergent compositions made of multi-particle systems, e.g. spray-dried granules and agglomerates (see page 5, lines 8 to 17 of the description). Applicant states that the homogeneity number (hereinafter called HN) as defined in claim 1 and in the description (see page 5, last paragraph to page 7 second paragraph) is the quotient of the compositional homogeneity between particulate admixture components (hereinafter called Xbulk) and the compositional homogeneity within a defined domain structure of the individual particles comprising a specific particulate component (hereinafter called Xpart) or in other words Xbulk is the ratio of the concentration of the selected ingredient in the particle with the lowest non-zero level of that ingredient to the concentration of the selected ingredient in the particle with the highest level of the selected ingredient and Xpart is the ratio of the concentration in the discrete volume with the lowest amount of the selected ingredient to the concentration in the discrete volume of the particle having the highest amount of the selected ingredient.

According to page 6 lines 3 to 4 of the description the selected ingredient can be any component useful in granular detergent compositions, e.g. surfactant, builder, polymer etc.

However this means that the value of HN for a given granule would be different for different components which makes a comparison with the state of the art impossible unless it is known on which component the calculation is based on.

In order to carry out a meaningful search, a surfactant has been chosen as the selected detergent ingredient for the calculation of HN (see claim 2).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/22395

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9207932	A	14-05-1992	US 5108646 A	28-04-1992
			AU 8949591 A	26-05-1992
			CA 2094831 A, C	27-04-1992
			CN 1061995 A	17-06-1992
			CZ 281939 B	16-04-1997
			CZ 9300633 A	13-07-1994
			EP 0554366 A	11-08-1993
			FI 931843 A	23-04-1993
			HU 67248 A, B	28-03-1995
			JP 2941422 B	25-08-1999
			JP 6502445 T	17-03-1994
			MX 9101779 A	05-06-1992
			NO 931474 A	25-06-1993
			NZ 240351 A	25-11-1994
			PL 173578 B	31-03-1998
			PT 99337 A	30-09-1992
			SK 39593 A	12-01-1994
			TR 25528 A	01-05-1993
			TR 26518 A	15-03-1995
GB 2317393	A	25-03-1998	AU 4356597 A	17-04-1998
			EP 0929637 A	21-07-1999
			WO 9813463 A	02-04-1998
WO 9835004	A	13-08-1998	GB 2321900 A	12-08-1998
			GB 2332445 A	23-06-1999
			AU 6149698 A	26-08-1998
			AU 6152098 A	26-08-1998
			AU 6272298 A	26-08-1998
			AU 6321098 A	26-08-1998
			AU 6322098 A	26-08-1998
			WO 9835002 A	13-08-1998
			WO 9835003 A	13-08-1998
			WO 9835005 A	13-08-1998
			WO 9835006 A	13-08-1998
WO 9710326	A	20-03-1997	BR 9610548 A	06-07-1999
			CA 2232071 A	20-03-1997
			CN 1202198 A	16-12-1998
			EP 0876473 A	11-11-1998
			JP 11512473 T	26-10-1999
			US 5733862 A	31-03-1998
US 5431857	A	11-07-1995	CA 2181242 A	27-07-1995
			CN 1143976 A	26-02-1997
			JP 9508162 T	19-08-1997
			WO 9520035 A	27-07-1995